

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A screening method for an RNase H inhibitor of a reverse transcriptase, comprising;

- (a) ~~a process to incubate~~incubating a substrate which is a primer hybridized to a template, a metal ion and a reverse transcriptase to form a complex,
 - (b) ~~a process to add~~adding a test substance after the process (a) and ~~incubate~~further incubating, and
 - (c) ~~a process to add~~adding dNTPs after process (b) to initiate DNA synthesis,
 - (d) measuring the amount of nucleic acid cleaved from the template after the process (c), and
 - (e) comparing the value from step (d) to a control lacking the test substance
- provided that;

the template is 5'-NRWXZ- 3' and the primer is 3'-Y- 5' (Y hybridizes to X of a template), the template is 5'-NRWX-3' and the primer is 3'-YZ- 5' (Y hybridizes to X of a template), or the 3' end of the template 5'-NRWXZ-3' is linked to the 5' end of primer 3'-Y-5' to be a single strand to form-substrate is 5'-NRWXZY- 3' (Y hybridizes to X),

wherein,

N is present or absent, and if present N is a nucleic acid 13—19₂mer DNA, RNA or a chimeric nucleic acid,

R is RNA, and the total length of N plus R is 14 mer or more,

W is present or absent and if present W is DNA or a chimeric nucleic acid,

X is a nucleic acid 15 mer or more nucleotides long DNA, RNA or a chimeric nucleic acid,

Y is a same length DNA, RNA or chimeric nucleic acid with the same length as X to which Y hybridizes[.];

In wherein if case that X to which Y hybridizes is DNA, then Y is DNA[.]; In if case that X

~~to which Y hybridizes is RNA, then Y is RNA[.]; In and if case that X to which Y hybridizes is a chimeric nucleic acid, then Y is a chimeric nucleic acid having complementary sequences and whose sugars of pair nucleotides are the same; (In the chimeric nucleic acid, in case that X to which Y hybridizes is DNA, Y is DNA. In case that X to which Y hybridizes is RNA, Y is RNA).~~

Z is present or absent, and if present, is a DNA, RNA or a chimeric nucleic acid

~~(provided that, W and Z can be absent).~~

2. (Previously Presented) The screening method of claim 1, wherein N is RNA, W is absent, X is RNA, and Y is RNA.

3. (Currently Amended) The screening method of claim 1, wherein N is RNA, W is absent, X is DNA, and ~~30~~ Y is DNA.

4. (Currently Amended) The screening method of any one of claims 1 - 3, wherein X is 18 mer or more DNA, RNA or a chimeric nucleic acid.

5. (Currently Amended) The screening method of any one of claims 1 - 3, wherein the metal ion is ~~Mgt~~⁺ Mgt²⁺ or Mn²⁺.

6. (Previously Presented) The screening method of claim 1, wherein a formation inhibitor to a complex of a reverse transcriptase, a substrate and a metal ion is added with dNTPs in process (c).

7. (Previously Presented) The screening method of claim 6, wherein the formation inhibitor

is heparin.

8. (Cancelled)

9. (Currently Amended) The screening method of claim ~~8~~1, wherein the template is a template whose 5'-end or 3'-end is labeled.

10. (Previously Presented) The screening method of claim 1, wherein the reverse transcriptase is a reverse transcriptase of a virus.

11. (Previously Presented) The screening method of claim 10, wherein the virus is HIV.

12. (Previously Presented) The screening method of claim 10, wherein the reverse transcriptase is Y188L mutant enzyme.

13. (New) The screening method of claim 10, wherein the reverse transcriptase is a mutant RNase H enzyme.